What is claimed is:

- [Claim 1] A method of inhibition or treatment of Human Immunodeficiency Virus (HIV) infection using 24-epibrassinolide (EBI), a plant hormone of structural formula I belonging to brassinosteroid series.
- [Claim 2] The method of claim 1 wherein said 24-epibrassinolide is used as an active ingredient of pharmaceutical compositions for the prophylaxis or therapy of AIDS and related diseases.
- [Claim 3] A pharmaceutical composition for the aims of the present invention comprising a therapeutically effective amount of 24-epibrassinolide.
- [Claim 4] A pharmaceutical composition containing an effective amount of 24-epibrassinolide in a combination with other anti-HIV agents.
- [Claim 5] The pharmaceutical composition according to claim 4, wherein the anti-HIV agents are selected from at least one group of inhibitors, such as protease inhibitors, reverse transcriptase inhibitors, or integrase inhibitors.
- [Claim 6] A food supplement for the aims of the present invention containing an effective amount of 24-epibrassinolide.
- [Claim 7] The food supplement of claim 6 wherein said pharmaceutical or over-the-counter preparation is a tablet, capsule, powder, suspension, solution, or aqueous emulsion.

[Claim 8] The food supplement of claim 6 incorporated into a food material.

[Claim 9] A vaginal tract protecting HIV-inhibiting composition containing 24-epibrassinolide as an active ingredient.

[Claim 10] The composition of claim 9 wherein said 24-epibrassinolide is a component of cream, vaginal insertion, or coating on a condom.